

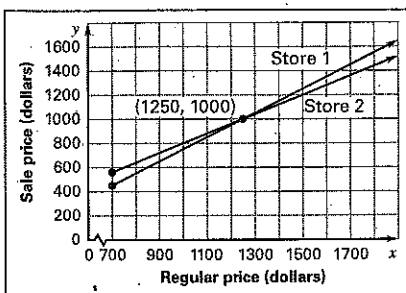
Lesson 3.1, continued

23. 10 multiple choice questions, 10 problem solving questions.

24. $y = 0.8x$

$y = x - 250$

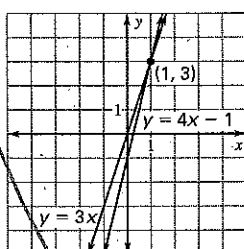
25.



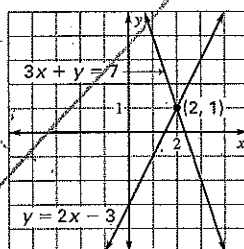
26. Store 1 has the better deal when the regular price is greater than \$1250.

Study Guide

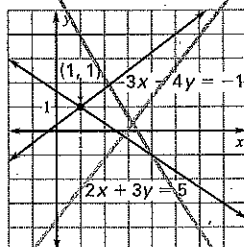
1.



2.



3.



4. $(-1, 2)$; consistent and independent

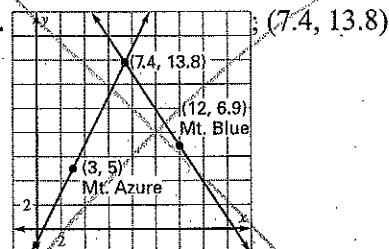
5. no solutions; inconsistent

6. no solutions; inconsistent 7. two nights

Interdisciplinary Application

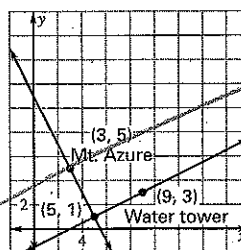
1. $y - 5 = 2(x - 3)$ 2. $y - 6.9 = -\frac{3}{2}(x - 12)$

3.



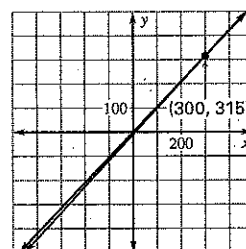
4. $y - 3 = \frac{1}{2}(x - 9)$ 5. $y - 5 = -2(x - 3)$

6. $(5, 1)$



Challenge Practice

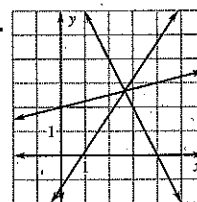
1. has a solution; The equations have different slopes and must intersect.



not graphed using an appropriate scale

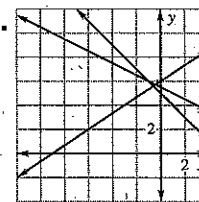
2. For each equation of the system: pick any coefficients for the variables x and y and then substitute the desired solution (a, b) for the corresponding variables to find the right-hand side of the equation.

3.



$\begin{pmatrix} 8 \\ 3 \end{pmatrix}$

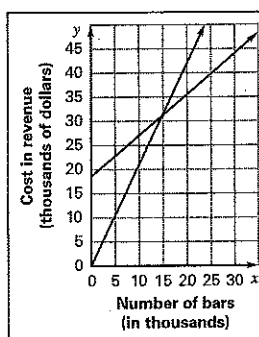
4.



no solution

5. a. $C = 0.85x + 18,500$; $R = 2.10x$

b.



$(14,800, 31,080)$; the number of bars to produce in order for the total cost to equal the total revenue; a loss for the company; a profit for the company

c. The company will have to produce fewer bars and spend less money to make the bars in order for the total cost to equal the total revenue.

d. The company will have to produce fewer bars and spend less money to make the bars in order for the total cost to equal the total revenue.